STATEWIDE DRINKING WATER ADVISORY COUNCIL

STATEWIDE SURVEY

2.28.2022

FOR THE GREATER

Study Methodology

- This study consisted of n=1,200 Michiganders recruited from online consumer panels.
- The online survey was fielded between Dec. 28, 2021, and Jan. 13, 2022, with an average completion time of 10.5 minutes.
- To ensure inclusivity, English, Spanish, Arabic and Bengali were offered as survey language options. Nearly all surveys were completed in English.
- Respondents were screened on the following criteria:
  - General industry screener
  - Ages 18+
  - Reside in Michigan
  - Aware of their tap water source (local municipal provider or well)
  - Representative demographic mix (locale/region, gender, ethnicity, age, etc.)

****Please note these are preliminary findings and more analysis is needed on results from this survey.***

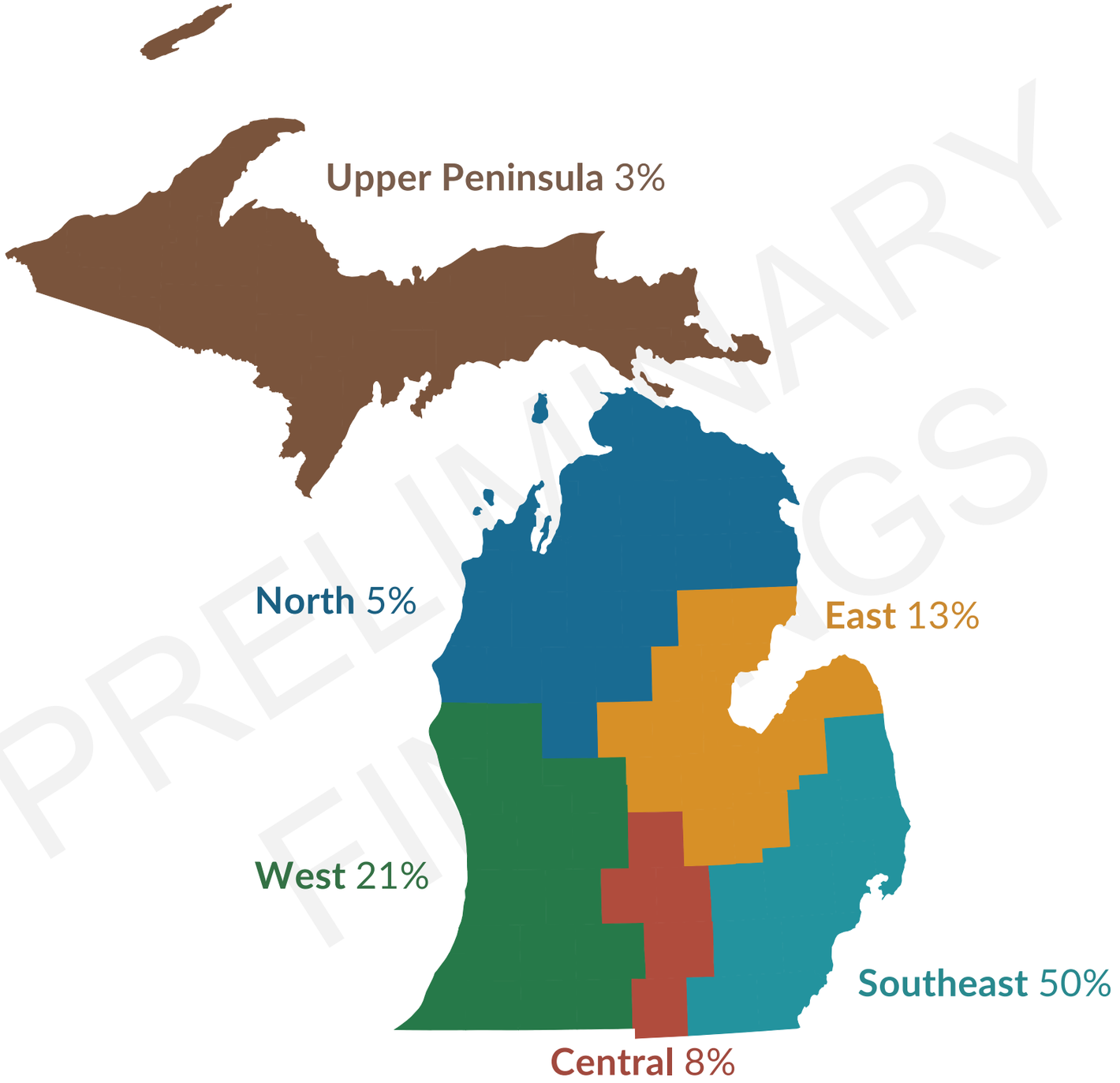
Sample Characteristics

	n=1,200
Gender	
Male	47%
Female	52%
Nonbinary	1%
Age	
18-34	24%
35-54	40%
55+	36%
Education	
Less than college graduate	22%
Some college/Associate	35%
Bachelor's+	43%
Income	
<$50K	43%
$50k-99K+	36%
$100K+	17%
Refuse	4%
Ethnicity	
Caucasian only	78%
Black/African American	11%
Asian American/Pacific Islander	4%
Hispanic/Latinx	4%
Native American	3%
Refused	1%

	n=1,200
Employment	
Working full time	44%
Working part time	12%
Stay-at-home parent	7%
Student (full or part time)	2%
Retired	23%
Not currently employed	12%
Region	
Southeast	50%
West	21%
Central	8%
East	13%
North	5%
U.P.	3%
Place of Residence	
Own	75%
Rent	25%
Area of Residence	
Urban	18%
Suburban	54%
Rural	27%
Farm	1%

	n=1,200
Water Source*	
Municipal	76%
Well (any)	24%
Children Under 6 in Home	
Yes	12%
No	88%
SVI	
Lower risk: <= 0.9	59%
Higher risk: > 0.9	41%

*Note that respondents who were unaware of the source of their tap water were screened out. A total of 67 respondents were unaware of the source of their water, which represents 2.4% of those who answered that question.



Statewide Key Findings

WATER QUALITY AND USE

- 2 in 3 Michiganders say their water is “good” or “excellent”
- A majority have no concerns about quality (55%) and use their tap water without filtering or other actions (58%)
- Michiganders say their water quality is good if it smells/tastes/looks OK to them or if they’ve had it tested

- 1 in 4 classified their water quality as “fair”
- One-third of Michiganders are ”somewhat concerned” about their water quality and a similar number report filtering their water before use
- Taste, color or smell issues led most to say their water is not good

- 1 in 10 say their water quality is “poor” or “extremely poor”
- Similarly, 1 in 10 are “very concerned” about their water quality and 12% indicated they do not use their tap water

LEAD CONCERNS & KNOWLEDGE

- A majority — 57% — say lead in tap water is common in Michigan

- Michiganders picked lead most often (37%) as a contaminant they're concerned about, but at a significantly lower level than those who perceived lead to be common in tap water

- 3 in 4 indicated that having lead water pipes could increase exposure risk
  - But only 1 in 3 know if their water system in general or their service line in particular contains lead pipes
  - And a bare majority (54%) know what material their in-home pipes are made of

- 2 in 3 know that risks related to lead exposure are heightened for young children and pregnant people, but only 50% were sure that "there is no safe level of lead"

WATER SUPPLIER COMMUNICATION

- 6 in 10 people receiving water from a public water supply say they're "confident my local water provider **is doing everything possible to ensure my tap water is clean and safe**"

- 54% agree they're **confident they'd be notified quickly** if there was a problem

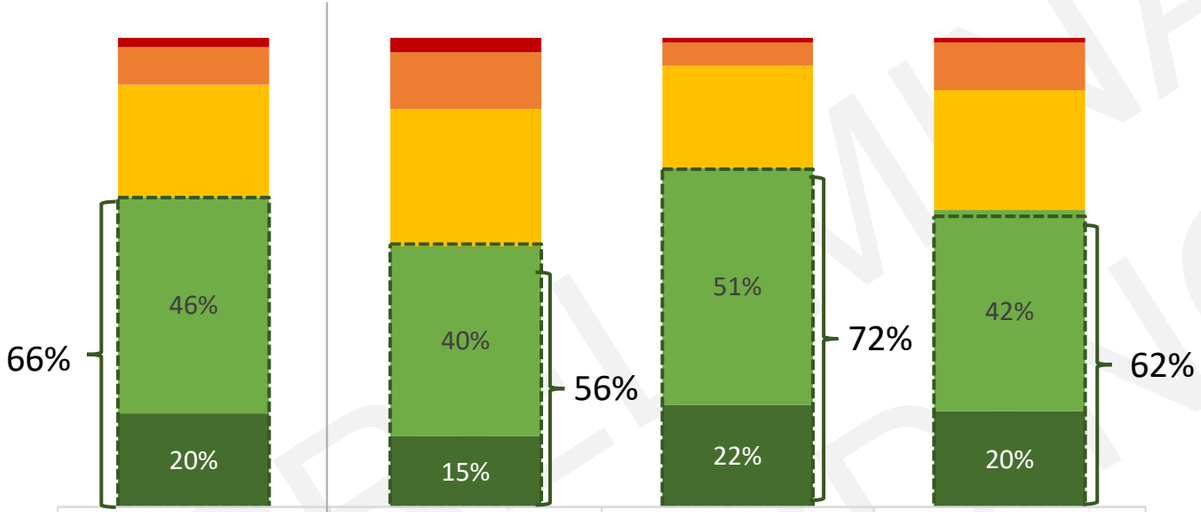
- Less than a majority of public water supply users agree they …:
  - Know **whom to contact** with questions about their tap water (46%)
  - **Receive enough information** about their water (43%)
  - **Receive regular communications** about water quality (30%)

- About **half of people (49%) recall receiving water quality information** in the past year
  - Information was from water suppliers, local government and the news
  - Delivered via mailed letter, water bill or local TV news

Detailed Findings:
Perceptions of Water Quality

PERCEIVED WATER QUALITY

Two-thirds of Michiganders believed their tap water is good or excellent quality.



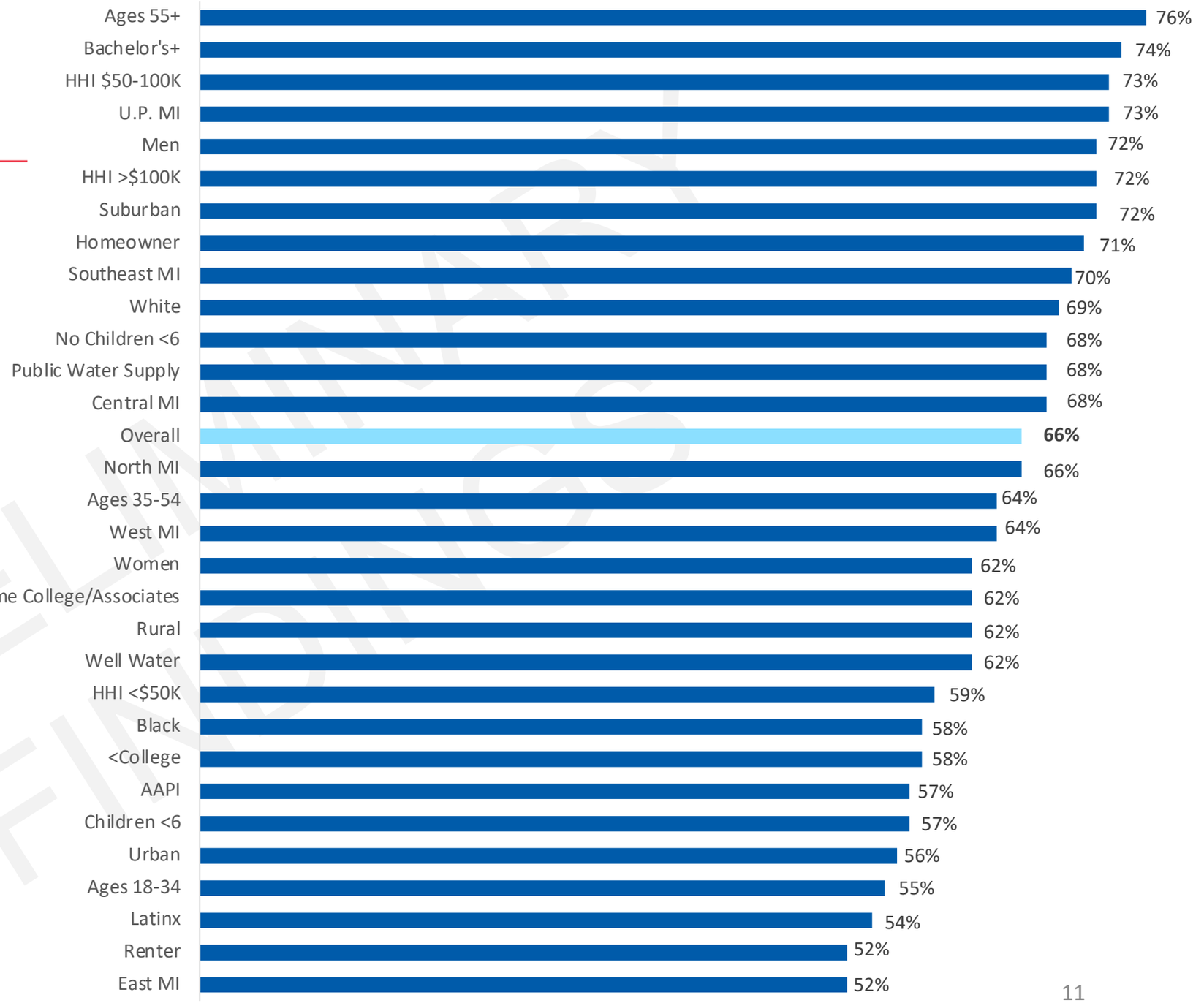
	Total Sample n=1200	Urban n=214	Suburban n=644	Rural n=342
Extremely poor	2%	3%	1%	1%
Poor	8%	12%	5%	10%
Fair	24%	29%	22%	25%
Good	46%	40%	51%	42%
Excellent	20%	15%	22%	20%
Top-2	66%	56%	72%	62%

Suburbanites are significantly more likely than people in urban and rural areas to view their water as high-quality

Q8: Overall, how would you rate the quality of the tap water your home receives?

PERCEIVED WATER QUALITY

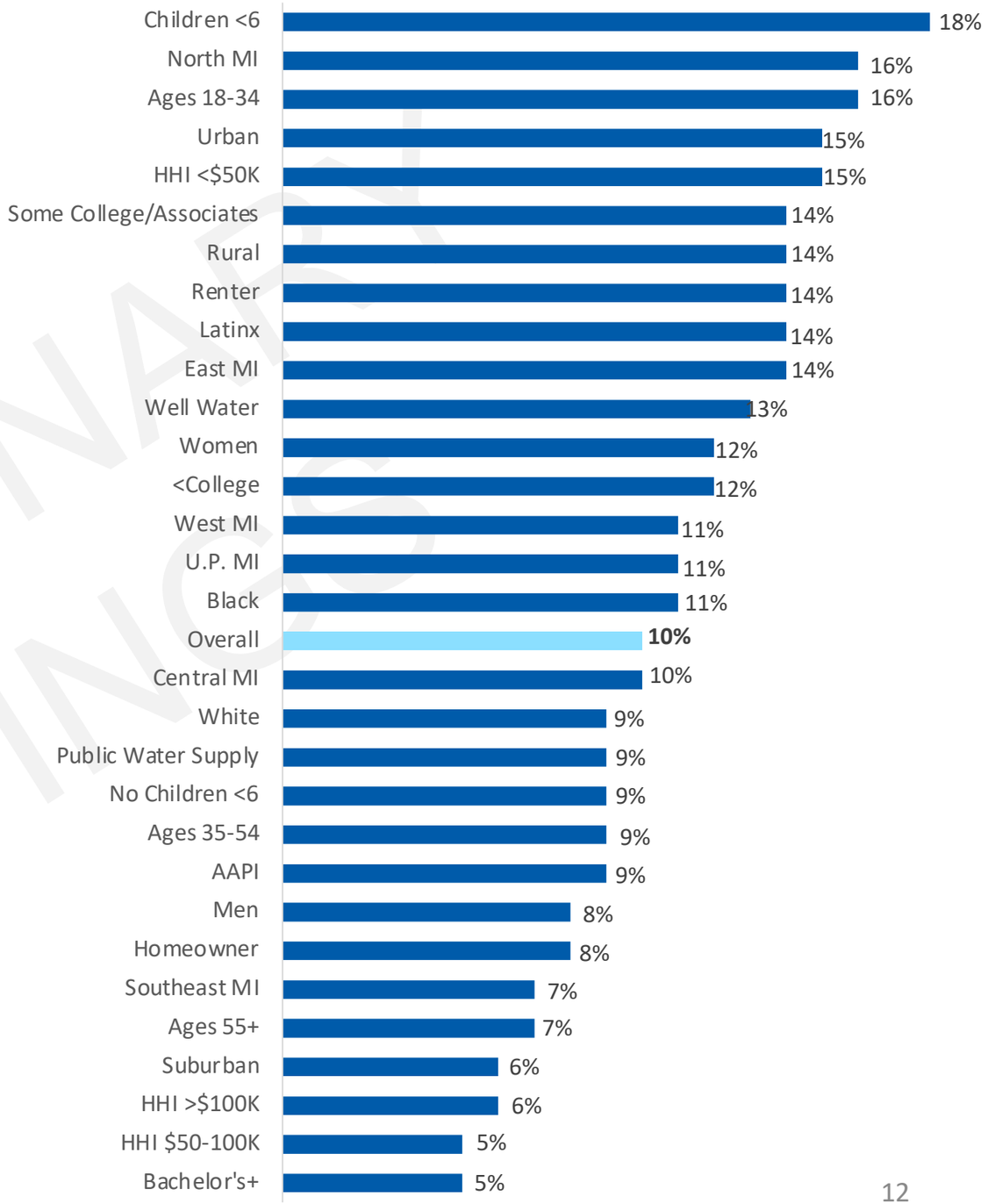
Percent of each of the following groups who say their tap water is **“Excellent” or “Good”**



Q8: Overall, how would you rate the quality of the tap water your home receives?

PERCEIVED WATER QUALITY

Percent of each of the following groups who say their tap water is **“Poor” or “Extremely Poor”**



Q8: Overall, how would you rate the quality of the tap water your home receives?

DRIVERS OF WATER QUALITY PERCEPTION

Drivers for Positive Perceptions of Home Tap Water Quality	
It is good / No issues with taste/smell/color	66%
Been tested / Tested frequently / Good reports	16%

n=796

Among those who rated their home tap water as excellent/good.

Note: Only responses with 10%+ charted.

Drivers for Negative Perceptions of Home Tap Water Quality	
Taste issues (metal, chlorine, bad)	26%
Color issues (cloudy, orange, rusty, not clear)	13%
It is okay / No issues with taste/smell/color	13%
Chemicals/minerals in water	12%
Smell issues (chlorine, sulfur, stinks)	12%
Filtration system is used / Water softener on system	10%

n=404

Among those who rated their home tap water as fair/poor/extremely poor.
Note: Only responses with 10%+ charted.

Q9: What leads you to feel that way about your tap water?

DRIVERS OF CLEAN/SAFE WATER PERCEPTION

Testing kits and water quality reports are the most common means for Michiganders to feel confident that their drinking water is safe and clean. Regular testing is most common for people with wells and in North and East MI.

However, **1 in 4** indicated that they were **uncertain of the safety and cleanliness of their water**, indicating a sizable portion of the population lacks the knowledge of where or how to ascertain the quality of their water.

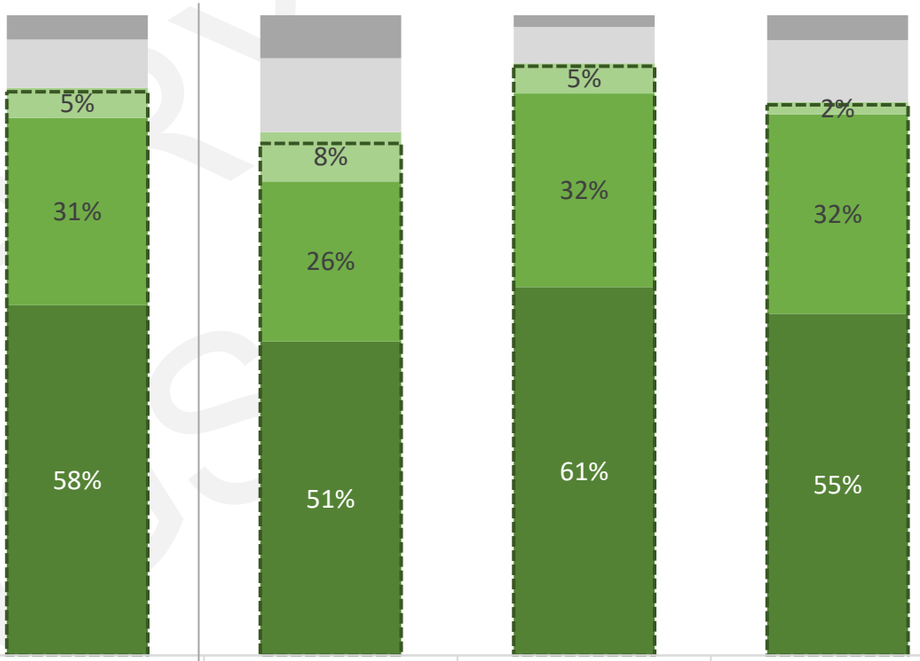
How do you know if your tap water is safe or clean?	Total Sample n=1,200	Urban n=214	Suburban n=644	Rural n=342
Gets tested frequently & regularly/Use test kit	26%	18%	20%	**44%**
Water quality reports/ Indicate no issues	18%	16%	**22%**	**10%**
Appearance (Water tastes, smells & looks good)	14%	19%	16%	9%
Trust that it is/Assume it is true	8%	7%	10%	5%
Use a filtration system	8%	8%	7%	8%
Don't know for sure/ You never know (uncertain)	**25%**	**29%**	**25%**	**23%**

Q10: How do you know if your tap water is safe or clean?

TAP WATER USE

The majority of Michiganders use their tap water without any filtering.

Urban-area respondents noted that they were more likely to either boil their water or rely on bottled water, but they were less likely to filter their water.

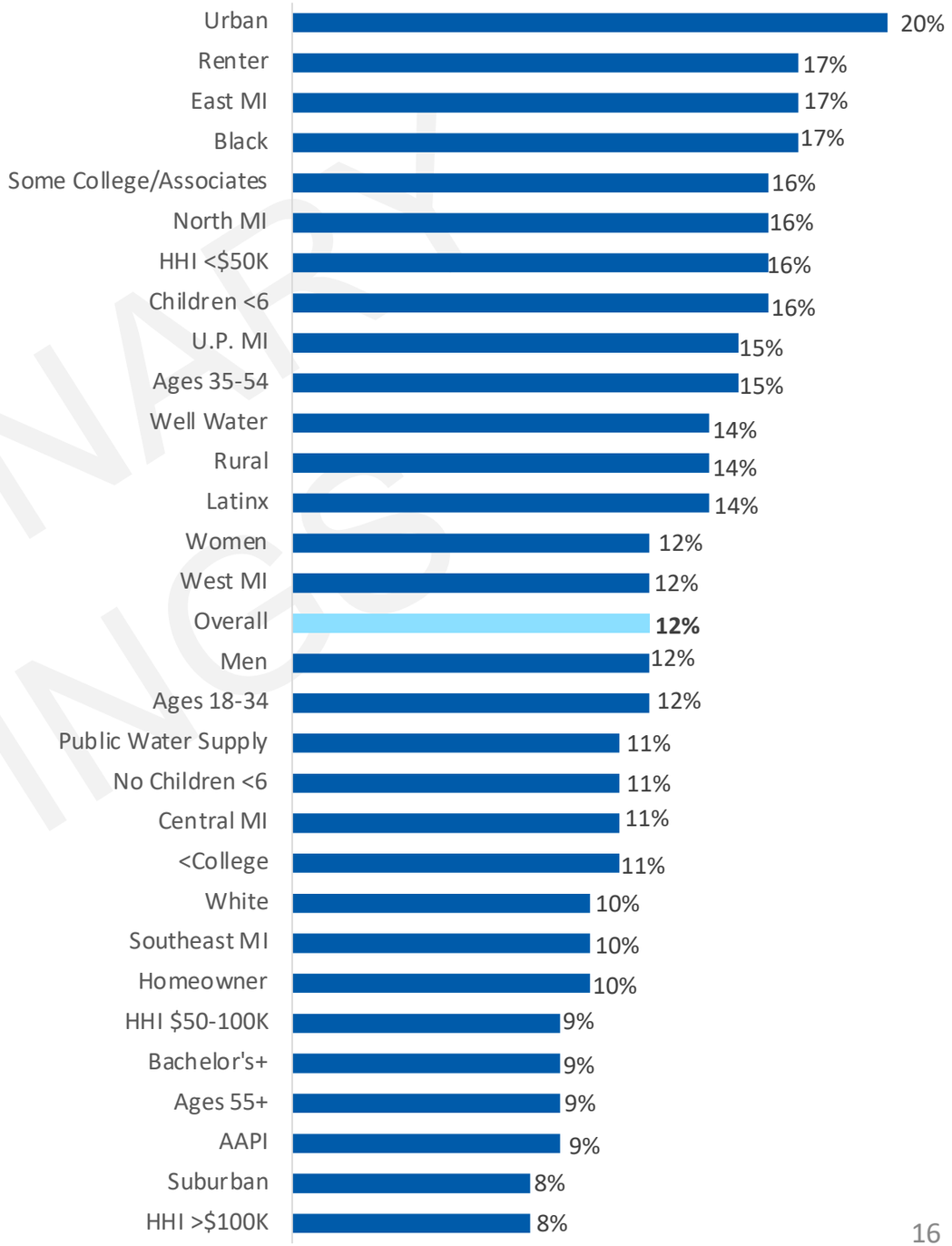


	Total Sample n=1200	Urban n=214	Suburban n=644	Rural n=342
Don't use my tap water	4%	7%	2%	4%
Use bottled water or water delivery	8%	12%	6%	10%
Boil it first	5%	8%	5%	2%
Filter it first	31%	26%	32%	32%
Use without filtering	58%	51%	61%	55%
Yes (collapse)	88%	80%	92%	86%

Q11: Do you currently drink, cook, or prepare formula with the tap water in your home? Choose any that apply.

TAP WATER USE

Percent of each of the following groups who say they **don't use their tap water and/or use bottled/delivered water** to drink, cook or prepare formula



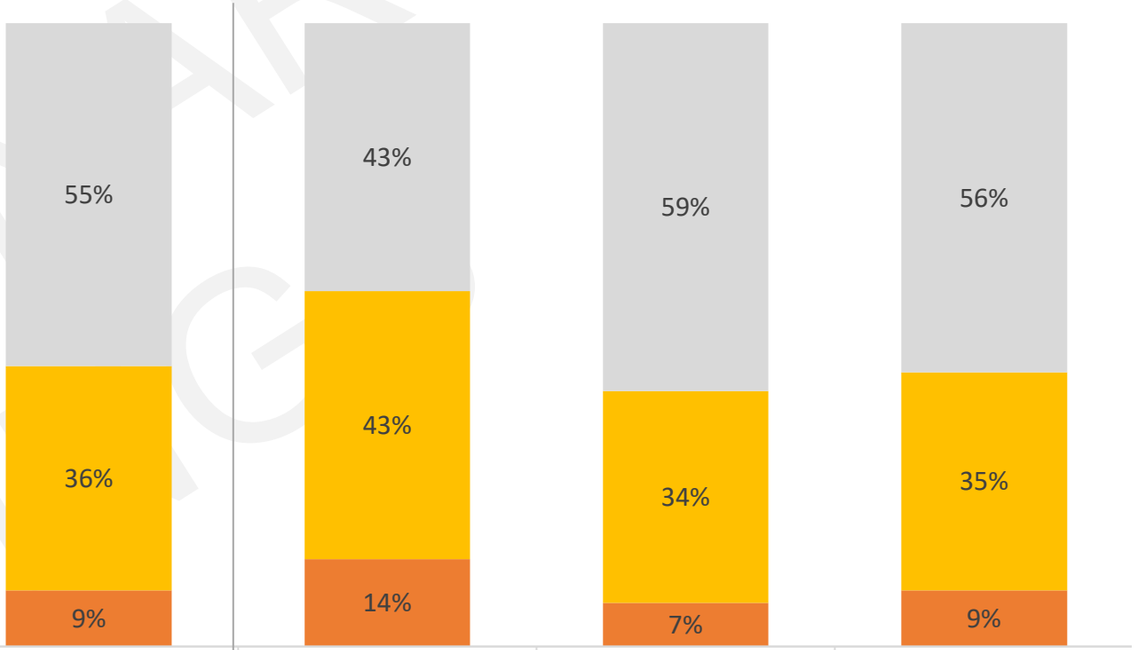
Q11: Do you currently drink, cook, or prepare formula with the tap water in your home? Choose any that apply.

LEVEL OF WATER QUALITY CONCERN

A majority of Michiganders were not concerned about the quality of their tap water.

Respondents from urban areas were significantly more likely to be concerned than suburban and rural respondents.

Rural residents report their water as “poor quality” almost as often as urban dwellers, but they are significantly less likely to be “concerned” about the quality than those residing in urban areas.

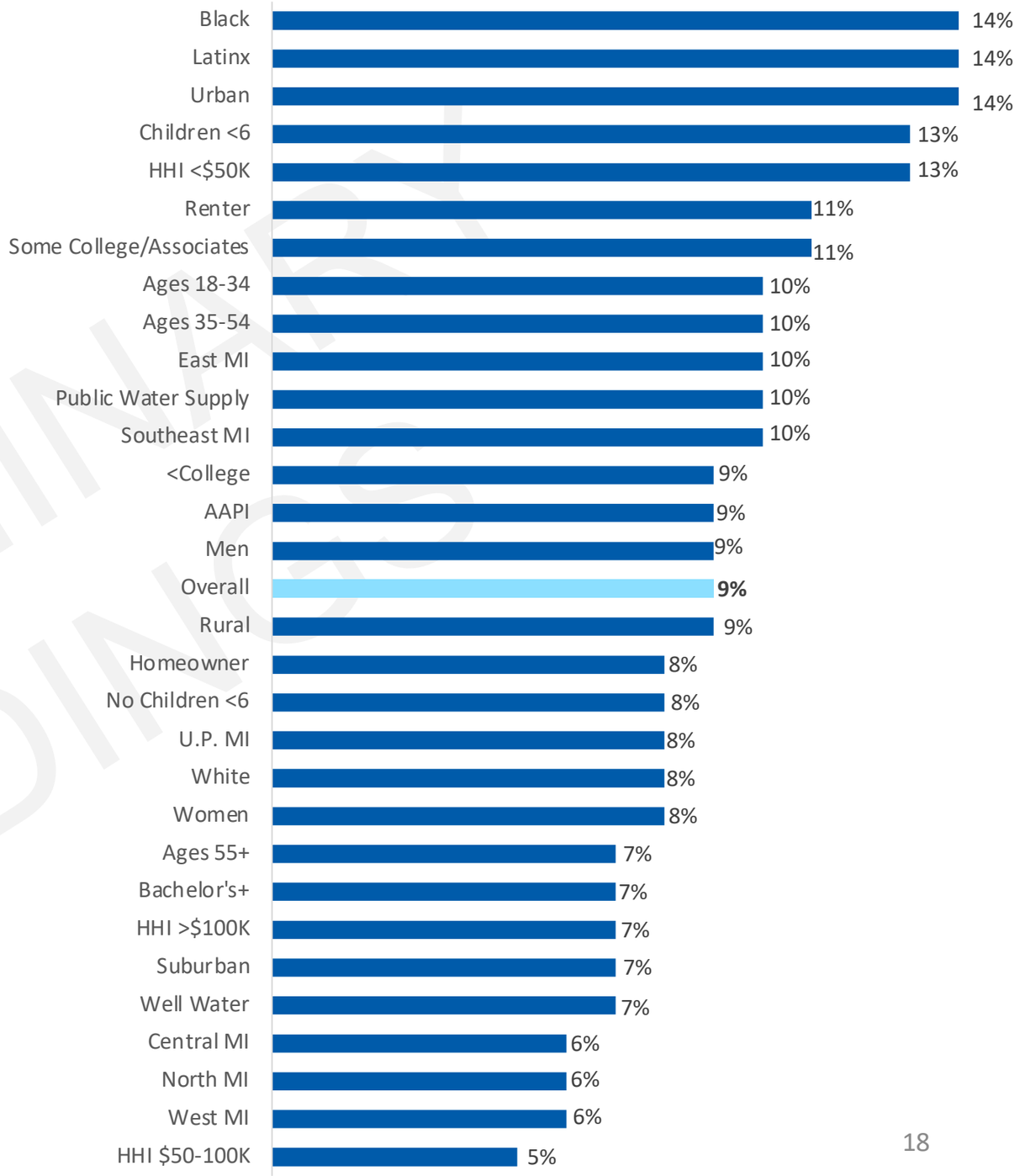


	Total Sample n=1,200	Urban n=214	Suburban n=644	Rural n=342
Not at all concerned	55%	43%	59%	56%
Somewhat concerned	36%	43%	34%	35%
Very concerned	9%	14%	7%	9%

Q12: Which of the following statements describes your feelings about the quality of the tap water your home receives?

LEVEL OF WATER QUALITY CONCERN

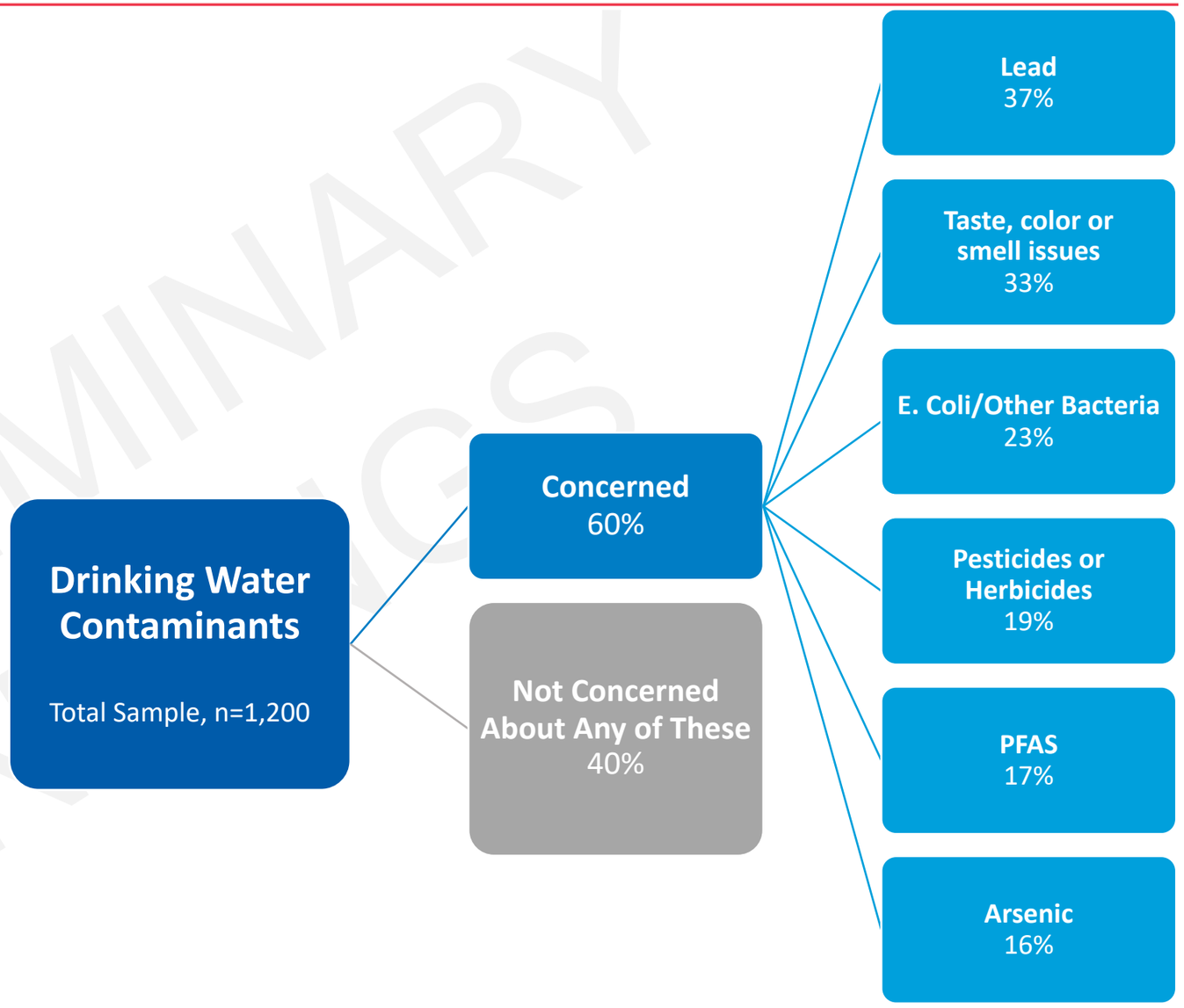
Percent of each of the following groups who say they are **“very concerned”** about their water quality



CONTAMINANT CONCERNS

When asked about specific drinking water contaminants, a majority Michiganders expressed concern about at least one of the listed options.

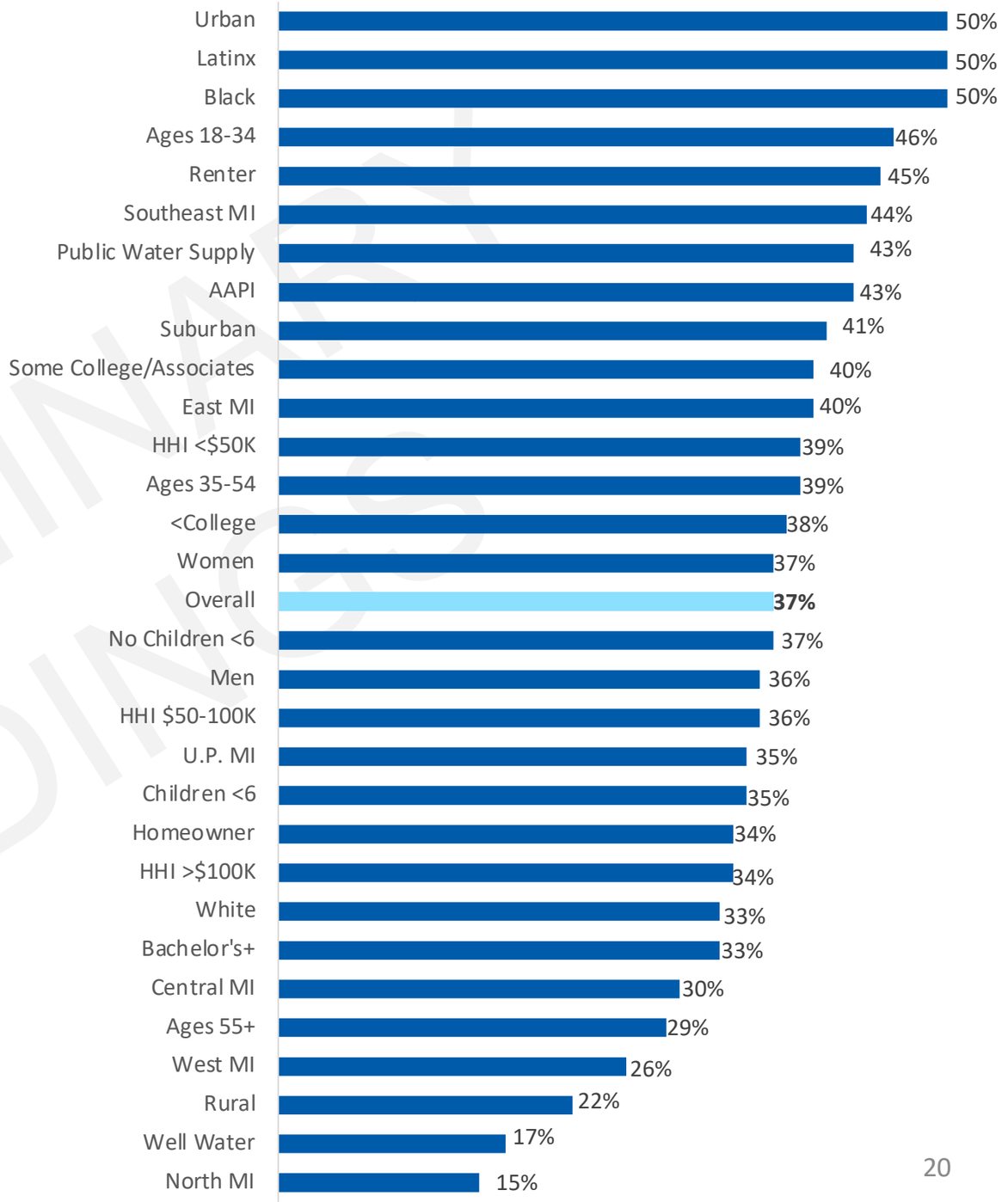
Lead is the leading contaminant of concern, followed by generic taste, color and smell issues.



Q13: Listed below are several drinking water contaminants. Which, if any, of these contaminants cause you concern for your drinking water? Choose any that apply.

CONTAMINANT CONCERNS

Percent of each of the following groups who say they are **concerned about lead** in their tap water

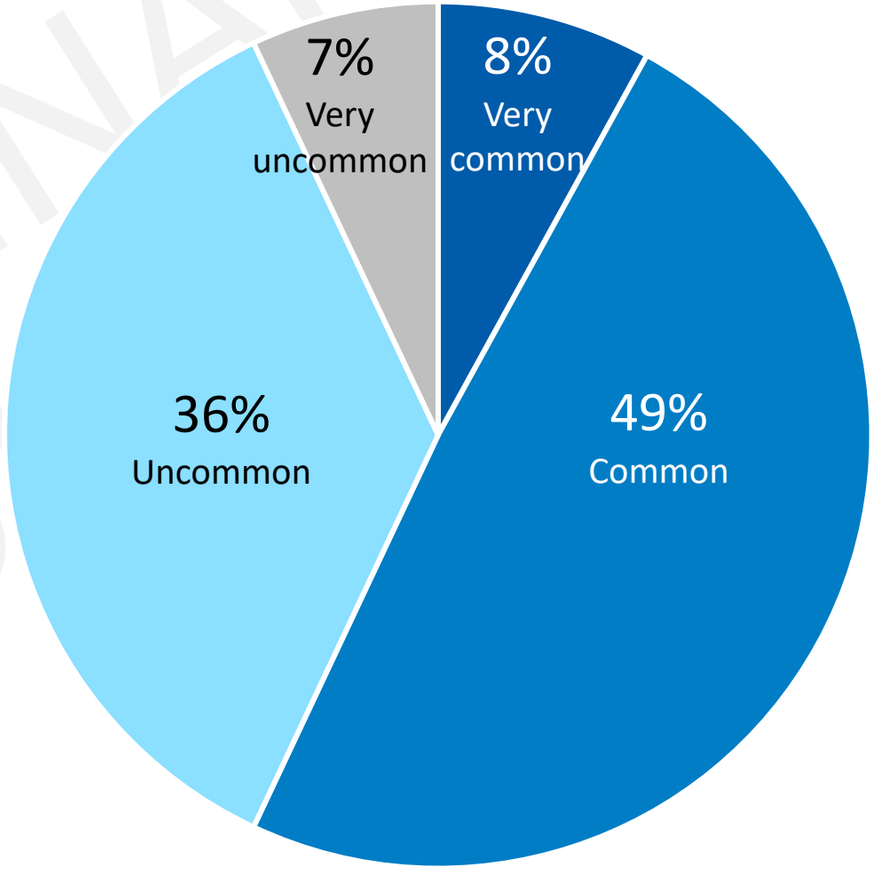


Q13: Listed below are several drinking water contaminants. Which, if any, of these contaminants cause you concern for your drinking water? Choose any that apply.

LEAD IN TAP WATER

Over half of all respondents believed that lead was either common or very common in households across the state.

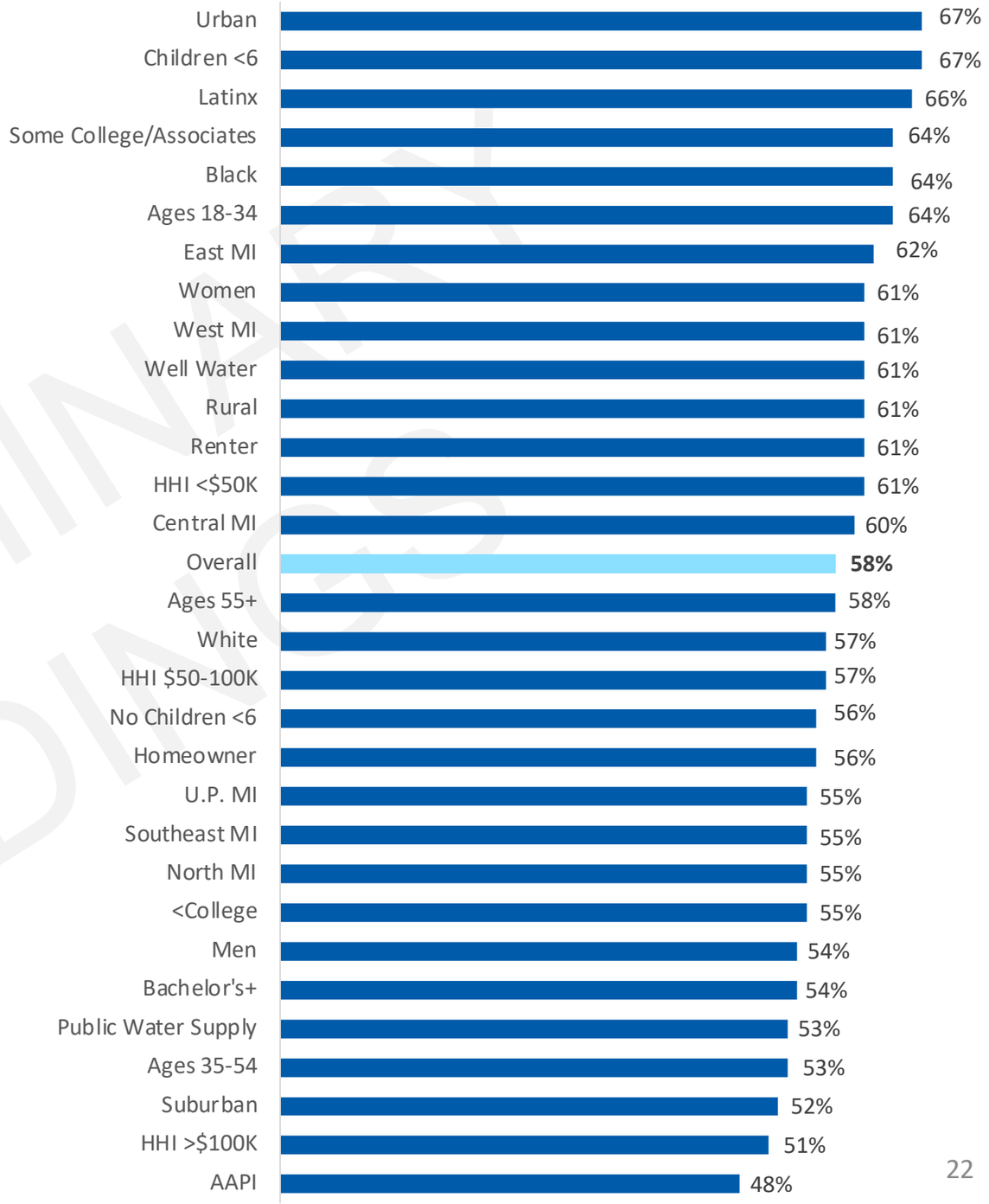
How common is lead in tap water in Michigan?



Q29. In Michigan, lead in tap water is…

LEAD IN TAP WATER

Percent of each of the following groups who say lead is **“very common”** or **“common”** in Michigan tap water

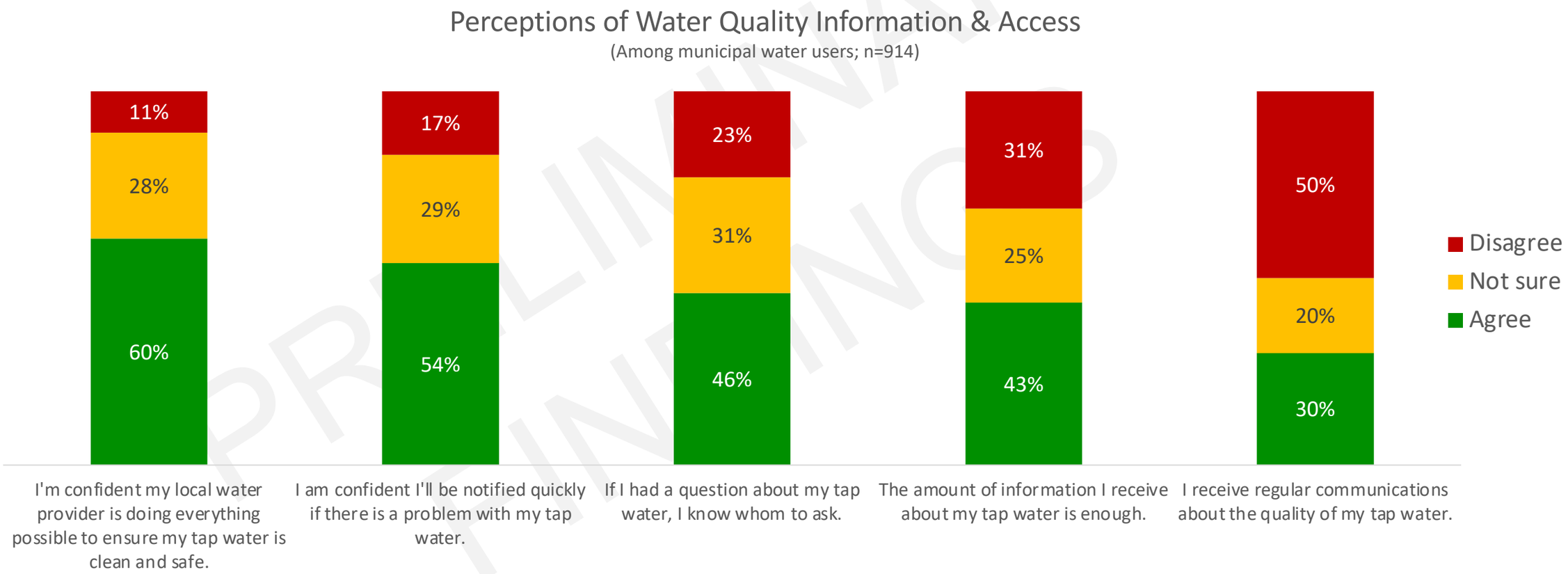


Q29. In Michigan, lead in tap water is…

Detailed Findings:
Public Water Supplier Communications

WATER SUPPLIER COMMUNICATIONS

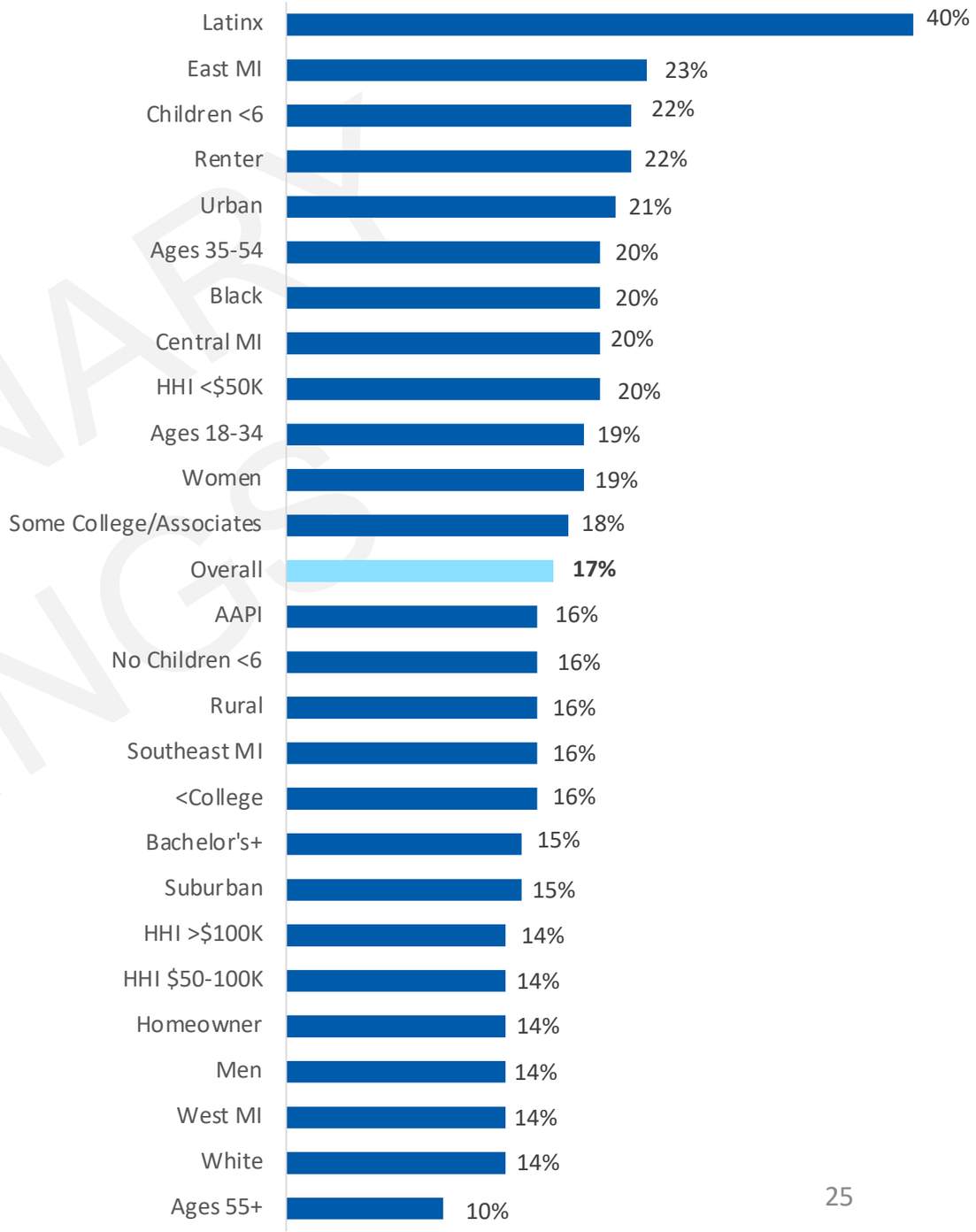
A majority are confident in their water provider but there is lots of opportunity for improvement. Users of public water supplies want more information, more often on their water.



Q19: How much do you agree with each of the statements below?

WATER SUPPLIER COMMUNICATIONS

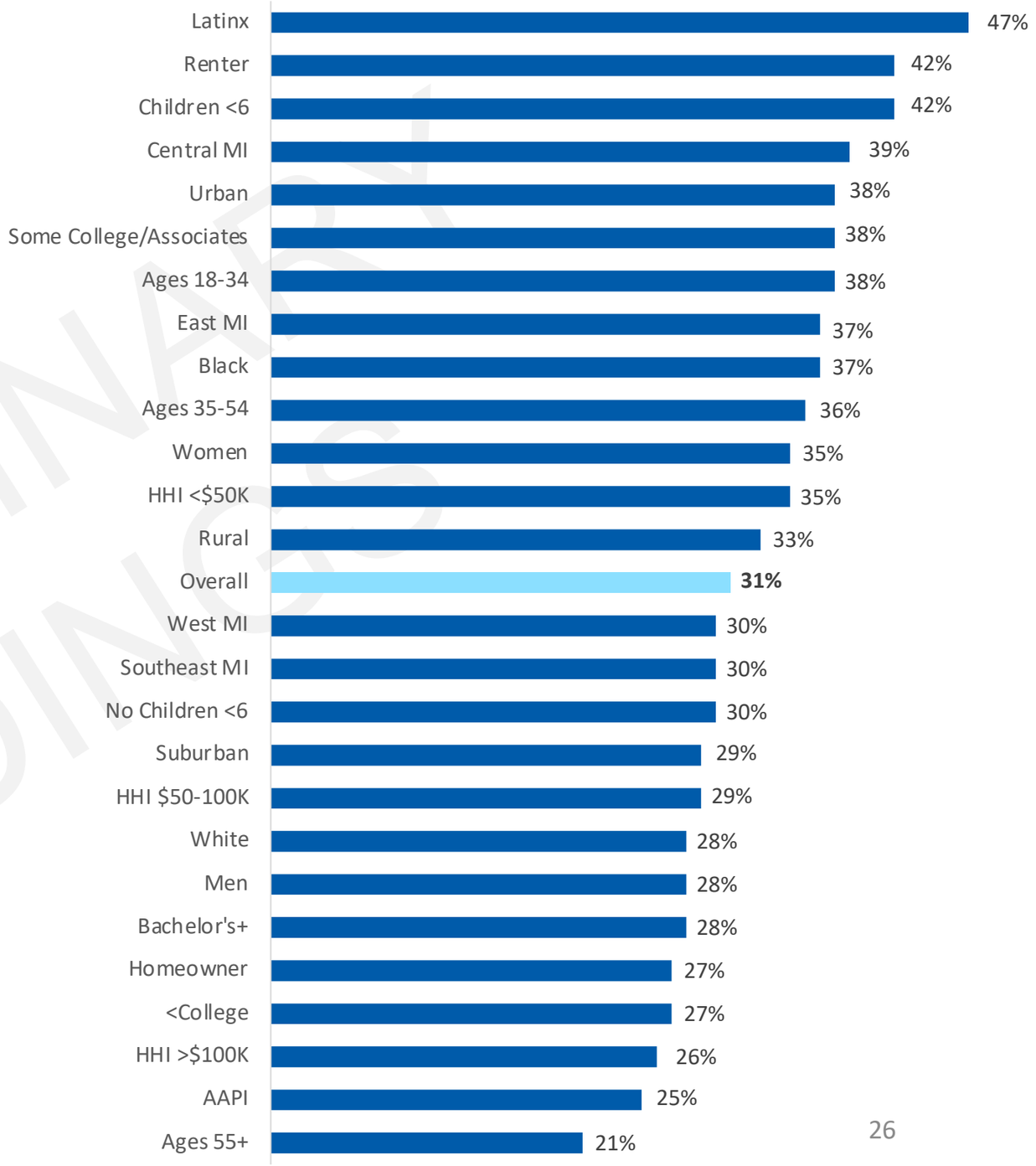
Percent of each of the following groups who have public water who **disagree** that they're **confident they'll be notified quickly** if there is a problem with their tap water



Q19: How much do you agree with each of the statements below?

WATER SUPPLIER COMMUNICATIONS

Percent of each of the following groups who have public water who **disagree** that the **amount of information received about their tap water is enough**



Q19: How much do you agree with each of the statements below?

SOURCE OF WATER QUALITY INFORMATION

49%

of municipal users recalled seeing information about tap water quality in the past year.

Source(s) of Tap Water Quality Information (Past year)	Total Sample n=914	Urban n=211	Suburban n=577	Rural n=126
Local water provider	24%	23%	25%	25%
Local government	17%	16%	18%	19%
The news	11%	**18%**	9%	6%
Local health department	8%	8%	8%	11%
Statewide or local water advisory council	7%	9%	7%	3%
MDHHS	6%	9%	6%	6%
EGLE (formerly DEQ)	6%	7%	6%	6%
Friend or family member	4%	6%	3%	5%
Other	1%	1%	1%	1%
Don't recall any info	51%	51%	51%	52%

Among municipal water users.

Q14: In the past year, have you received or seen information about the quality of your tap water from any of the following sources? Check all that apply.
Q15: How did you receive the information about the quality of your tap water? Select any that apply.

CHANNEL OF WATER QUALITY INFORMATION

Individual mailings and water bill stuffers were the most common sources of water quality information.

Channel(s) of Tap Water Quality Information (Past year)

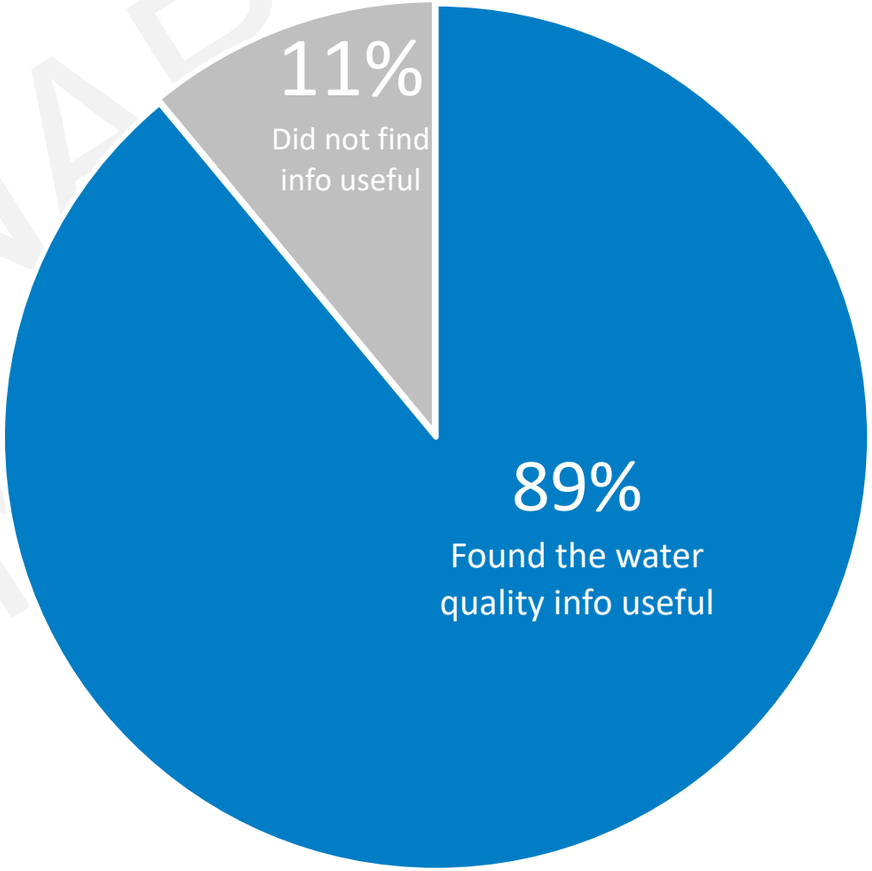
	Total Sample n=439	Urban n=102	Suburban n=277	Rural n=60
Letter in the mail	35%	32%	36%	33%
With my water bill	27%	26%	26%	32%
Local TV	22%	**32%**	19%	18%
Local government newsletter	20%	15%	21%	20%
Water provider website	13%	16%	14%	**5%**
Social media (any)	12%	**20%**	9%	12%
Local government website	11%	10%	12%	7%
Newspaper	8%	11%	7%	5%
Email	7%	8%	7%	3%
Local event	4%	**8%**	2%	3%
Door hanger	3%	6%	3%	0

Among those who recall tap water quality information.

Q14: In the past year, have you received or seen information about the quality of your tap water from any of the following sources? Check all that apply.
Q15: How did you receive the information about the quality of your tap water? Select any that apply.

USEFULNESS OF WATER QUALITY INFORMATION

Nearly everyone who recalled receiving water quality information found that info to be useful.



Among those who recall tap water quality information; n=439.

Q18: Was the information on the quality of your tap water useful to you?

ACTIONS TAKEN BASED ON QUALITY INFORMATION

56%

of those who recalled receiving water quality information **made changes based on that info.**

Decisions/Actions Taken After Receiving Information?	Total Sample n=439	Urban n=102	Suburban n=277	Rural n=60	Good/Excellent Water n=297	Fair/Poor Water n=142
Yes, it confirmed what I already thought	22%	21%	22%	27%	24%	18%
Yes, I got a filter for my water or I continued to use a filter	21%	32%	17%	17%	14%	33%
Yes, I started or continued using bottled water	17%	32%	11%	15%	7%	37%
Yes, I try to flush water in the morning before using drinking water	6%	10%	6%	2%	5%	8%
Not really - I did not make or change any action	41%	**25%**	47%	43%	51%	**21%**
No, it was not very useful	3%	0	4%	3%	2%	4%

Among those who recall tap water quality information.

Q18a: Did you make any decisions or take any actions after receiving that information about the quality of your tap water? Choose any that apply.

TRUSTED SOURCES

When asked to check any source they'd trust to provide accurate information about tap water safety, Michiganders selected their local and state health departments, their local water providers, EGLE and local government.

Federal authorities and media (traditional or online) were less likely to be indicated as trustworthy information sources, indicating a preference for local, "boots on the ground" sources.

Trusted Sources for Accurate Information about Drinking Water Safety

	Total Sample n=1,200	Urban n=214	Suburban n=644	Rural n=342
My local health department	42%	**26%**	41%	51%
MDHHS	37%	30%	39%	37%
My local water provider	36%	38%	42%	24%
EGLE (formerly the DEQ)	36%	29%	37%	39%
My local government (city or county)	34%	29%	40%	24%
EPA	31%	27%	33%	31%
Statewide/local drinking water adv. council	25%	22%	28%	22%
Federal Department of Health and Human Services	20%	18%	20%	20%
CDC	19%	19%	20%	16%
My healthcare provider(s)	12%	13%	13%	12%
Media such as TV or radio	8%	16%	8%	3%
Online media sources (any)	5%	7%	5%	3%
I would not trust any of these sources	8%	11%	8%	6%

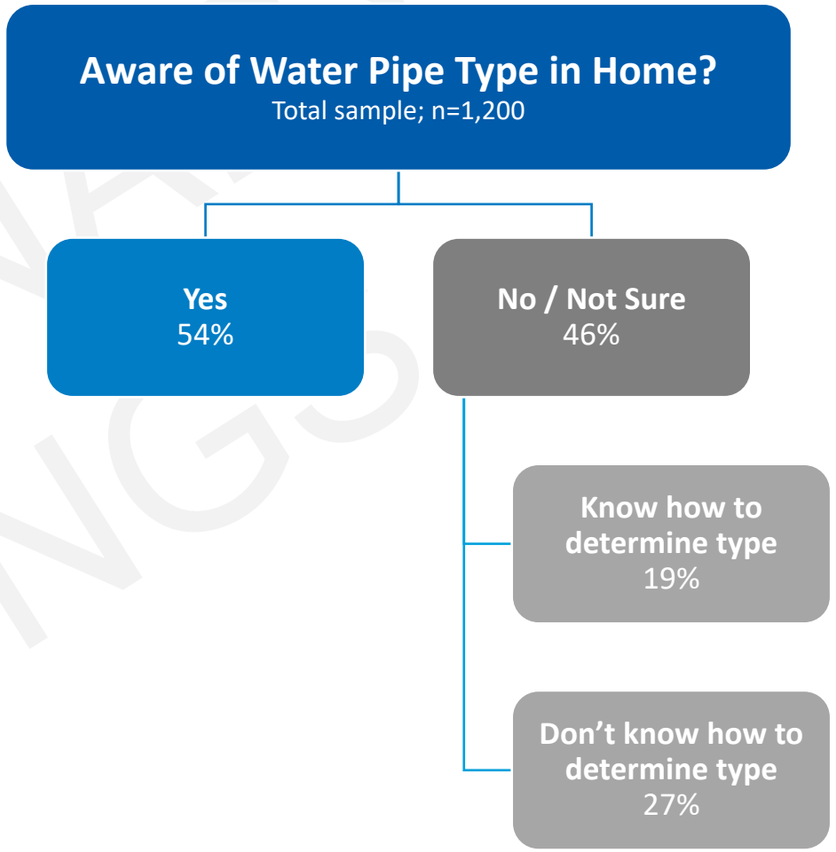
Q30: If you had concerns about the safety of your drinking water, which of the following would you trust to provide you accurate information? Select any sources you would trust.

Detailed Findings:
Water Infrastructure Knowledge

LEAD PIPES IN HOME

Nearly half of Michiganders are unaware of the type(s) of water pipes in their homes. Among that group, half don't know how to identify the type of pipes in their homes, indicating widespread ignorance about the topic.

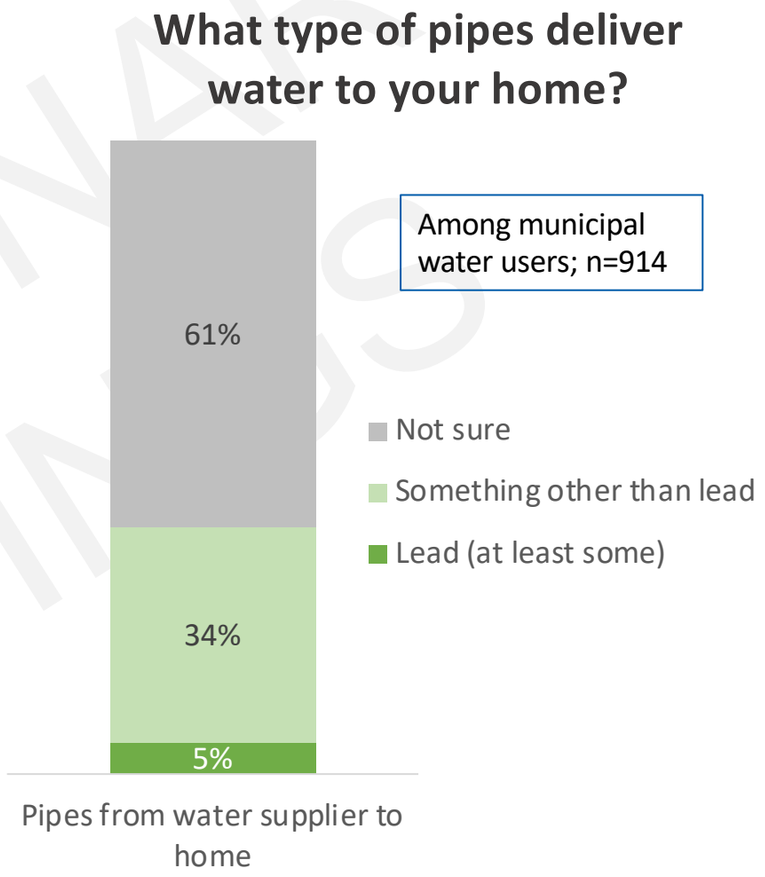
Renters, ages 18-34, households with incomes under $50K and respondents from urban areas were significantly less likely to know what type of water pipes are in their home.



Q24: Do you know what type of water pipes (such as copper, plastic, galvanized steel, lead, etc.) you have in your home?
Q25: If you wanted to, do you know how to figure out what type(s) of water pipes are in your home?

LEAD PIPES TO YOUR HOME

Most municipal water users are unaware of the composition of the pipes that deliver water into their homes.



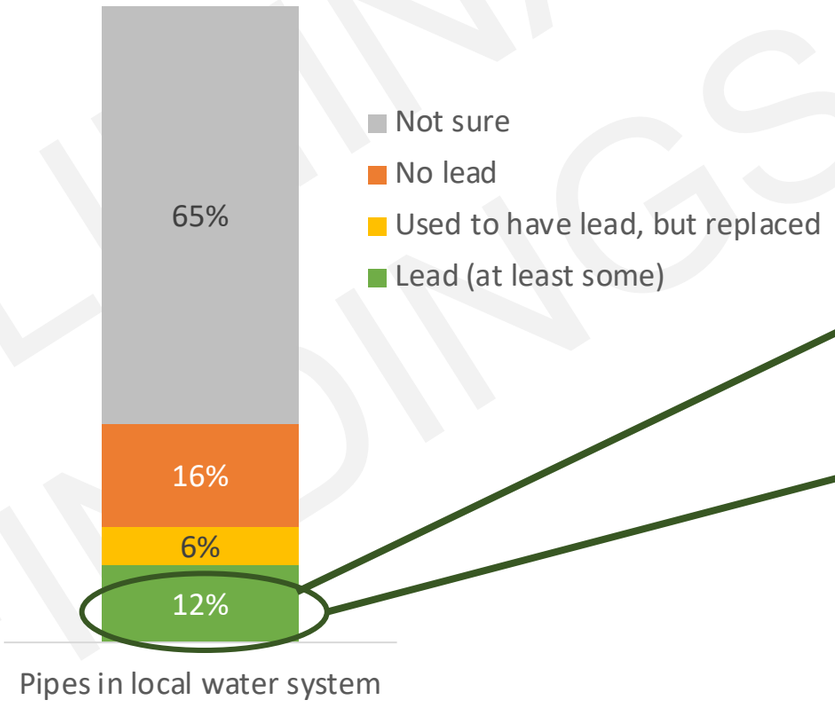
Q23: Do you know what type of water pipes (such as lead, copper, galvanized steel, etc.) deliver water into your home from your water provider?

LEAD PIPES IN SYSTEM

Most public water users are unaware of the composition of the pipes in the surrounding water system.

Just over 1 in 10 indicated the presence of lead pipes in either system, with the bulk of that awareness of lead pipes coming from local government, news media and their water providers.

Does any part of your local water system contain lead pipes?



Source(s) of Information	
Local government	35%
News	33%
Local water provider	24%
Social media (any)	15%
Neighbor	14%
Friend or family member	14%
State government	12%
Other	7%
I don't recall	10%

Has your local water providers started to replace the lead pipes in their system?	
Yes	57%
No	18%
Not sure	25%

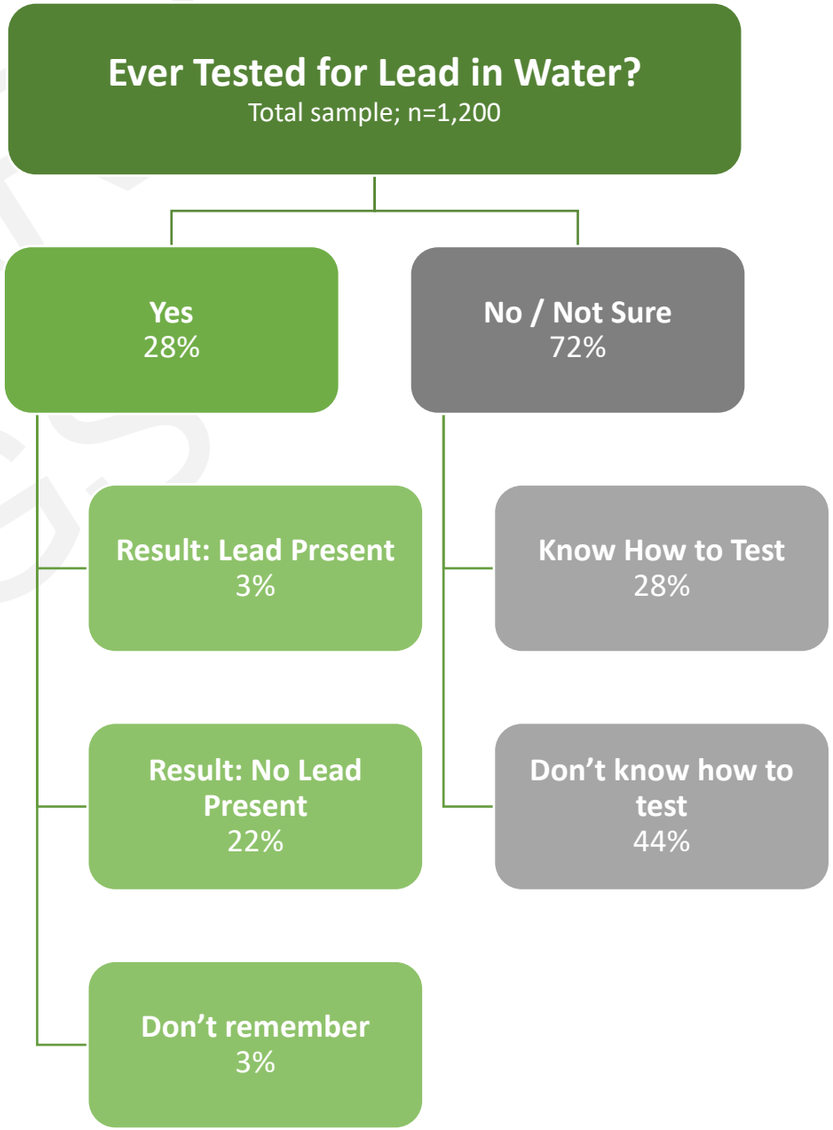
n=109

Q20: Do you know if your local water system has any lead pipes? (By 'local water system', we mean the pipes outside your home that deliver tap water to you and your neighbors.)
Q21: How did you learn there are lead pipes in your local water system?
Q22: As far as you know, has your local water provider begun the process of replacing the lead service pipes in your community?

TESTED FOR LEAD IN TAP WATER

Just over 1 in 4 Michiganders have tested their water for lead, with only a fraction finding lead in their homes.

Unfortunately, nearly half of all respondents indicated they were unaware of how to test their water for lead, indicating a clear need for education on the “how-to” of lead testing.



Q26: Have you ever tested your tap water for lead?
Q27: If you wanted to test your home’s tap water for lead, do you know who or how to get your water tested?
Q28: What were the results of your home’s lead testing?

Detailed Findings:
Lead Knowledge

LIKELY TO INCREASE LEAD PRESENCE IN TAP WATER

Only the most obvious risk — the presence of lead water pipes — was recognized by the most Michiganders as a factor that increases lead exposure risk, while half of respondents indicated having an older home increased the risk of lead in tap water.

What Can Increase Likelihood of Drinking Tap Water that Contains Lead

	Total Sample n=1,200	Urban n=214	Suburban n=644	Rural n=342
Having lead water pipes	74%	69%	74%	78%
Drinking water from a home built pre-1988	50%	48%	48%	54%
Construction or plumbing repairs in or near my home	24%	28%	24%	22%
Having water faucets and fixtures from before 2014	17%	20%	16%	19%
Drinking tap water first thing in the morning	12%	**19%**	10%	11%
Boiling tap water before drinking or cooking with it	5%	**11%**	4%	3%
I don't think any of these actions increase the chance of consuming lead*	3%	4%	2%	2%
I don't know*	12%	14%	13%	9%

**Exclusive response option*

Q31: Which of the following can increase the likelihood of drinking tap water that contains lead? Choose all that apply.

LEAD KNOWLEDGE

Awareness of the general risks associated with lead exposure were uneven. Most Michiganders recognized that lead is most dangerous to pregnant people and children, but understanding of the relative "safe" levels of lead in drinking water were more ambiguous.

Further, 13% of respondents indicated that they were uncertain or disbelieved all the lead risk statements shown to them.

Believability of Statements Related to Lead in Tap Water

	Total Sample n=1,200	Urban n=214	Suburban n=644	Rural n=342
Lead exposure is most dangerous for young children and pregnant women	67%	64%	68%	68%
No amount of lead in drinking water is safe	56%	57%	55%	55%
A small amount of lead in drinking water is safe	15%	15%	15%	14%
The health effects of lead exposure are always obvious	7%	10%	7%	4%
I don't think any of these statements are true*	3%	4%	3%	2%
I don't know*	10%	8%	10%	11%

**Exclusive response option*

Q32: As far you know, which of the following statements related to lead in tap water are true? Choose any statements you believe to be accurate.

COMMON SOURCES OF LEAD

Tap water trailed only paint as the most common perceived source of lead exposure. Few Michiganders were aware of the lead exposure risks associated with dust, though.

Nearly 1 in 8 Michiganders were unaware of any of the most common sources of lead exposure.

Perceived Most Common Source(s) of Lead Exposure	Total Sample n=1,200	Urban n=214	Suburban n=644	Rural n=342
Paint	76%	77%	75%	80%
Tap Water	58%	59%	57%	58%
Toys	22%	21%	21%	24%
Soil	20%	19%	20%	19%
Dust	11%	9%	10%	13%
I don't know*	12%	11%	12%	11%

**Exclusive response option*

Q33: As far as you know, what are the most common sources of lead exposure? Choose all that apply.